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A.D. 1798 . . . . . N<sup>o</sup> 2231.

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S P E C I F I C A T I O N

OF

THOMAS ROWNTREE.

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FIRE-PLACES OF COPPERS, BOILERS, &c.

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L O N D O N :

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Fire-places of Coppers, Boilers, &c.

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ROWNTREE'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, THOMAS ROWNTREE, of Great Surry Street, Blackfriars Bridge, in the Parish of Christchurch, in the County of Surry, Engine Maker, send greeting.

**WHEREAS** His most Excellent Majesty King George the Third, did, by  
5 His Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the First day of May, in the thirty-eighth year of His reign, give and grant unto me, the said Thomas Rowntree, His especial licence that I, the said Thomas Rowntree, during the term of years therein mentioned, should and lawfully might use, exercise, and vend, within England, Wales, and the  
10 town of Berwick upon Tweed, my Invention of “A NEW METHOD OF APPLYING FIRE FOR THE PURPOSE OF HEATING OF BOILERS AND OTHER VESSELS WHERE HEAT IS REQUIRED, AND WHICH MAY ALSO BE APPLIED TO OTHER USEFUL PURPOSES;” in which said Letters Patent there is contained a proviso obliging me, the said Thomas Rowntree, by an instrument in writing under my hand and seal, to  
15 cause a particular description of the nature of my said Invention, and in what manner the same is to be performed, to be inrolled in His Majesty’s High Court of Chancery within one calendar month after the date of the said recited Letters Patent, as in and by the same (relation being thereunto had) may more fully and at large appear.

20 **NOW KNOW YE**, that in compliance with the said proviso, I, the said Thomas Rowntree, do hereby declare that my said Invention is described in manner following, that is to say:—

For heating of coppers, boilers, furnaces, ovens, and stoves, my fire-place is much smaller than heretofore made use of for the same sized copper, boiler,  
25 furnace, oven, or stove; (instead of placing my fire-place, according to the common practice, immediately under the boiler or other vessel) I place it at



*Rowntree's Method of Heating Boilers and other Vessels.*

the front side or end, as I see most convenient, in such a manner as to oblige the flame to rise in the front side or end and pass all round the vessel, &c., which at the same time it strikes the bottom of the vessel, &c. without suffering the flame to pass off in a flue or flues, as it usually does in the common way, and by that means sending the heat into the flues, instead of its being 5 used where it ought to be, namely, on the vessels, &c. This my method effectually prevents; for by means of a small perpendicular or other opening into a box or trap, which I call a reservoir, and which I place horizontal or diagonal as the situation may require, and is made of iron, brick, stone, or any other material capable of bearing heat, where a valve is placed riding on 10 centres or otherwise, and standing in a diagonal or other direction as is found most convenient, the flame is returned or impeded in its progress to the chimney, and made to descend below the bottom of the vessel, and passes out at the bottom, top, or side of said box, trap, or reservoir into the common chimney; this reservoir is placed between the vessel, &c. and the chimney. 15 To the opening which admits the flame into the reservoir is affixed, when necessary, sliders, registers, or stops, which serve to encrease or diminish the heat; the valve in the reservoir is for the same purpose in another degree, which more immediately appertains to increasing or diminishing the draft, which it does by moving the said valve into different positions as the speed of 20 the operation may require.

In witness whereof, I, the said Thomas Rowntree, have hereunto set my hand and seal, this Thirty-first day of May, in the year of our Lord One thousand seven hundred and ninety-eight.

THO<sup>s</sup> ROWNTREE. (L.S.) 25

**AND BE IT REMEMBERED**, that on the Thirty-first day of May, in the thirty-eighth year of the reign of His Majesty King George the Third, the said Thomas Rowntree came before our said Lord the King in His Chancery, and acknowledged the Instrument aforesaid, and all and everything therein contained and specified, in form above written. And also the Instrument aforesaid 30 was stamped according to the tenor of the several Statutes made in the sixth year of the reign of the late King and Queen William and Mary of England, and so forth, and in the seventeenth, twenty-third, and thirty-seventh years of the reign of His present Majesty King George the Third.

Inrolled the First day of June, in the year last above written. 35

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